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10/598,900	06/15/2007	Mark Gretton	169/US/01	1829
36593                      7590                      12/30/2009 HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 8910 RESTON, VA 20195				
EXAMINER				
OLSEN, LIN B				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/598,900

**Applicant(s)**

GRETTON ET AL.

**Examiner**

LIN B. OLSEN

**Art Unit**

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 September 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,2,4-9,11 and 15-26 is/are rejected.  
7) ☐ Claim(s) 3,10 and 12-14 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 14 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

This action is in response to the filing on September 14, 2006 of an application containing 26 claims; with claims 1, 25 and 26 being independent.

#### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

#### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on March 11, 2008 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

#### ***Specification***

The disclosure is objected to because of the following informalities: In paragraph 32, 7<sup>th</sup> line from the end of the paragraph in the printed publication, Fig. 3 is identified as containing the navigation menu; the Examiner respectfully suggests that Fig. 10 shows the navigation menu.

Appropriate correction is required.

#### ***Claim Objections***

Claims **1, 10, 25 and 26** are objected to because of the following informalities:

Claim 10 is objected to because the term "the option" should be "the selectable option."

Claims 1, 25 and 26 are objected to because they recite that the device is programmed to "be able to calculate". The phrase weakens the claim. The examiner suggests deleting "be able to". Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims **1 and 26** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite that the device is "adapted to" calculate. It has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138. The positive recital "configured to" is suggested.

***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim **26** is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims fail to define a statutory process. There does not appear to be sufficient structural and functional interrelationships

between the computer program and other claimed elements of a computer or processor which permit the computer program's functionality to be realized. For the claim to be statutory there is a requirement that there be a functional interrelationship among the data and the computing processes performed when utilizing the data. A process consisting solely of mathematical operation does not manipulate appropriate subject matter and thus cannot constitute a statutory process. The recital of software being embodied in computer readable media would define a sufficient structural and functional relationship to satisfy the statutory requirement

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of

the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims **1, 11, 15, 17-25 and 26** are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,760,661 to Klein et al. (Klein)

Regarding independent **claims 1, 25 and 26** respectively the device, method and software product articulations of the invention, **A navigation device programmed with a map database and software that enables a route to be planned between two user-defined places, in which the device is further programmed** – Klein col. 3 lines 19-32 describes a typical navigation device that performs these functions.

**(i) to be able to calculate and to display a 2-D or 3-D representation of the actual road being traveled along and the current location of the device on that road and** - See Klein col. 3 lines 44- 56 as illustrated by Fig. 2A illustrating this functionality.

**(ii) to receive and process dynamic travel information relating to the route;**  
- Klein col. 3 lines 34- 38 describe receiving traffic information.

**wherein the device is adapted to calculate and to display a schematic view showing, at one time, at least the remainder of the entire route from the current**

**location of the device, for any location of the device on the route,** - while Fig. 2A is described as a showing a detail from a map with the route, there is no reason to conclude that by changing scale (See col. 3, line 63) the route couldn't show the entire route. The schematic of the route is the colored path superposed on the map.

**the schematic view including graphical depictions of dynamic travel information relating to the route.** - Fig. 2A shows areas of traffic jam with various colors (Col. 3 lines 51-53).

Regarding **claim 11, The device of claim 1, wherein the user can, by touching a screen on the device, task away from the 2-D or 3-D representation of the actual road being traveled along to a menu screen which displays one or more options that, if selected through a further touch action, initiate a re-calculation of the route.** - Klein describes using a touch sensor on the display as an input device (Col. 3, lines 9-10) and as a result of an input key opening an option menu that includes options that ultimately lead to a recalculation of the route (Col. 3 line 57-Col. 4).

Regarding **claim 15, The device of claim 11 in which the menu screen displays selectable options relating to one or more of the following functions:**

- (a) calculate alternative route;**
- (b) calculate alternative route without including a predefined extent of the road ahead;**

**(c) calculate alternative route without including a predefined road;**

**(d) revert to original route.** – See Klein description of the options listed at col. 3 line 63- col. 4 line 4 which each do these functions.

Regarding **claim 17, The device of claim 1 that receives dynamic travel information using a receiver for a wireless network.** – Klein col. 3 lines 12-18 allows for the receiver of traffic information to be wireless via radio or mobile telephone.

Regarding **claim 18, The device of claim 17 in which the wireless network is a short range network established between the device and a mobile telephone, the mobile telephone obtaining the dynamic travel information over a cellular wide area network.** – Klein col. 3 lines 12-18 allows for the receiver of traffic information to be wireless via radio or mobile telephone.

Regarding **claim 19, The device of claim 17 in which the dynamic travel information sent to the device comprises geocoded data that defines the location to which the dynamic travel information relates.** – Klein col. 3, lines 38-41 describes the information containing standardized coordinate information which the Examiner interprets as geocoding.

Regarding **claim 20, The device of claim 17 in which the dynamic travel information sent to the device comprises non-geocoded location data that**

**defines the location to which the dynamic travel information relates and the software on the device geocodes that data.** - Klein describes in col. 1 lines 34-51 various forms of traffic information providers without being specific how the services indicate the location of traffic incidences. The Examiner takes notice that it is well known how to convert one geographical measurement system into another and it would be obvious to one of ordinary skill in the art at the time of the invention to include such code in the device.

Regarding **claim 21, The device of claim 20 in which the non-geocoded data is in TMC format and the device includes in memory TMC tables that it can look up in order to relate the TMC format data to a location in the geocoded co-ordinate system that the device uses so that it can display the travel information at the applicable position.** - Klein at col. 3 13-15 suggests a radio receiving TMC messages. Although the details of using such data are not outlined in Klein, it is implicit in Klein that such information could provide the geographical information needed.

Claims **22-24** are rejected for incorporating the above errors from the parent claims by dependency.

Claims **2, 4-9 and 16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Klein as applied to claim 1 above, and further in view of U.S. Patent No. 7,027,917 to Ikeda (Ikeda).

Regarding **claim 2, The device of claim 1 in which the schematic view is a linear representation showing the entire route or the remainder of the route.** -

Klein's schematic is superposed on the map rather than being linear, but Ikeda shows at Fig. 6 a time sequence of a linear representation of a trip. While the implementation described by Ikeda does not necessarily cover each entire trip, this is due to the traffic information described in Ikeda. Melding the access to traffic information of Klein (Col. 3, lines 18) Ikeda's mechanism would cover an entire route. Further, the split screen of Ikeda (Fig. 4) could be used in its normal mode (col. 5 lines 57-60) to display Klein's route in the second display area while the schematic is displayed in the first area. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the linear representation of Ikeda with the ability to show detail of Klein to provide a less burden on the driver as suggested in Ikeda col. 1 lines 59-61.

Regarding **claim 4, The device of claim 1 in which the dynamic travel information is displayed at the same time as the 2-D or 3-D representation.** - As suggested by Ikeda, (col. 5 lines 57-60) the schematic and second display area displaying navigation information could function simultaneously. Similarly Klein's Fig. 2A display shows the dynamic information at the same time as the maps.

Regarding **claim 5, The device of claim 1 in which the dynamic travel information is only displayed at a different time from the 2-D or 3-D representation.** - Ikeda Fig 4 illustrates only the Dynamic travel information displayed.

Regarding **claim 6, The device of claim 1 in which the dynamic travel information is a dynamic representation of traffic conditions.** - Klein at col. 5 lines 19-28 discussed showing a normal route in green and jams in blue. While Ikeda uses icons to distinguish the traffic conditions.

Regarding **claim 7, The device of claim 6 in which the dynamic representation of traffic conditions graphically represents the traffic flow direction.** - By placing the icons at spaced apart locations on the route, Ikeda indicates the traffic flow direction.

Regarding **claim 8, The device of claim 7 in which the dynamic representation of traffic conditions also graphically represents one or more of the following traffic conditions:**

**(i) stationery traffic;**

**(ii) queuing traffic;**

**(iii) slow traffic;**

**(iv) road closure or lane closure or road works.** – Ikeda Fig. 3 illustrates some icons to be used; Among them are “Stopped Vehicle” and “Traffic Jam” equivalent to stationary and slow traffic.

Regarding **claim 9**, The device of **claim 1** in which the dynamic travel information is represented by a graphical icon or other kind of selectable option that represents one or more of the following:

- (i) accident;
- (ii) traffic jam;
- (iii) road works;
- (iv) road closure;
- (v) general incident;
- (vi) lane closed;
- (v) heavy rain;
- (vi) strong winds;
- (vii) ice;

(viii) fog. . — Ikeda Fig. 3 illustrates some icons to be used; Among them are “Traffic Jam” and “Snow” and “Frozen” equivalent to traffic jam and ice,

Regarding **claim 16**, The device of **claim 9** in which each selectable option is one of the following:

- (a) a graphical icon;
- (b) a control or check box; or

(c) a name. Ikeda Fig. 3 illustrates the graphic icons which are used.

***Allowable Subject Matter***

Claims **3, 10 and 12-14** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The cited prior art neither teaches nor reasonably suggests that in a navigation device programmed with a map database and software that is configured to plan a route between two user-defined places, to calculate and to display a 2-D or 3-D representation of the actual road being traveled along and the current location of the device on the road and to receive and process dynamic travel information relative to the route. Further the navigation device calculates and displays a schematic view showing, at one time, at least the remainder of the entire route from the current location of the device, for any location of the device on the route, the schematic view including graphical depictions of dynamic travel information relating to the route. That the navigation device displays an icon that represents how recently the dynamic travel information was received by the device.

Further that when the icon is selected, the device displays more details of the dynamic travel information associated with that option.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure and is listed on the enclosed form 892. Any inquiry concerning this communication or earlier communications from the examiner should be directed to

LIN B. OLSEN whose telephone number is (571)272-9754. The examiner can normally be reached on Mon - Fri, 8:30 -5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas G. Black can be reached on 571-272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lin B Olsen/  
Examiner, Art Unit 3661

/Thomas G. Black/  
Supervisory Patent Examiner, Art Unit 3661